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| EXAMINER KHAN, SHAFFIQUE H | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,695

Applicant(s)

AIZU ET AL.

Examiner

SHAFIQUK KHAN

Art Unit

4183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 29-53 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Chow et al (US 7010002 B2) of records in view of Kalmanek, JR. et al. (US 2003/0007622).

Regarding Claim 29, Chow discloses a home terminal apparatus that is connected to an external network to which a server apparatus is connected and terminal apparatus being connected to the router via home network for sending and receiving data to and from a router (Fig 1, sheet 1). Chow also discloses a communication unit operable to send and receive data to and from the server apparatus repeatedly (Fig 1, sheet 1 and Col 3, lines 43-46). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period during when relationship between

global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130]. Kalmanek teaches network address translation for any information that a calling party or a called party (such as PDA, cell phones, VCR) desires to keep private such as caller ID information or address information should be accessible to the network but not to other untrusted entities (page 9, paragraph [0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the NAT of Kalmanek in the system of Chow to obtain a system containing a router having a holding period for a relationship between a global address assigned to the router and a local address of a terminal because this allows the system to keep some information private. However, Chow in view of KalamaneK does not disclose to set a period shorter than the holding period as a sending interval at which the data is sent.

Kalmanek, in the same field of invention, discloses KEEP ALIVE message. While a connection (such as corresponding relationship between global address and local address) is on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claim 30, Chow in view of Kalmanek discloses a mobile terminal device is connected to the external network, the mobile terminal device can send the control request to control the specific home terminal apparatus (Col 11, Lines 50-54).

Regarding Claim 51, Chow in view of Kalmanek discloses a terminal apparatus is home terminal apparatus (Chow: Fig 1, sheet 1 where terminal resides in a home).

Regarding Claim 52, Chow in view of Kalmanek an internet terminal is an apparatus for internet browsing, also commonly known as network computer (connected to a network) or an interpersonal computer (Chow: Sheet 1, figure 1).

Regarding Claim 31, Chow in view of Kalmanek discloses a wireless PDA device that sends packet data thru a webpage and enters command to reset an appliance such as VCR. The associated server creates a message containing the VCR command and sends to NSP (network server platform). The NSP translates the message into a TIA/EIA-136 message. The NSP retrieves the IP address for the AP of the subscriber's home network, wraps it up in IP message and sends it to AP (access port). When AP

receives this message it extracts the SMS and send it to VCR. Thus it's an anticipated function of the applicant's invention to send the packet data from an outside location and perform control processing by sending the control info to a target home appliance (Col 11, lines 50-67).

Regarding Claim 32, Chow in view of Kalmanek discloses a plurality of terminal apparatuses are connected to the home terminal apparatus via the home network (100) (Chow:Fig 1, sheet 1). A control unit operable to control the home terminal apparatus according to the control information (EWCSF access port connected to MTA. The AP and MTA may be physically one unit or two physically distinct and interconnected units. Media terminal equipment integrated with a modem for access to service provider's broadband transport network and to the service provider's broadband packet network, (Col 8, lines 12-18), the access port receives and sends unless signals to a plurality of wireless devices. This architecture (communication unit) also allows the user control these devices remotely from the residence, business, SOHO or public environments (Col 2, Lines 62-66).The communication exchange between the NSP and the network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, (Col 11, Lines 15-24)).

Regarding Claim 53, Chow in view of Kalmanek discloses home appliances (Chow: figure 1, sheet 1).

Regarding Claim 33, Chow discloses a generation unit to generate packet data to be sent to the server periodically (VoIP, abstract). Chow further discloses about a storage unit (generation unit) (a main central processing unit (CPU) (capable of sending and receiving data) that includes ROM and RAM memory, (Col 17, Lines 22-34); packets of voice and data information received over the Ethernet interface are passed to the appropriate endpoint as desired by the user. Additionally, main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service maintained (Col 18, Lines 27-24)); Chow also mentions about a storage unit of terminal apparatus (generation unit and storage unit are interconnected) stores a unique terminal ID (which is a Mac address (6 byte address) comes from the manufacturer uniquely given and commonly known) of the home terminal apparatus, local port of the terminal device, address of the server and local port of the server (A port is an address that identifies which process is to receive a message that is delivered to a given machine; Widely used applications have well-known port numbers assigned to their servers so that clients (have port numbers too) process in other computers can readily make requests as required (Col 18, lines 50-55). The servers send responses based on requests in an interval. (This concept of port is commonly known in network world). In addition, Directory server—contains E.164 number to IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN gateway, or the IP address of a NSP. Responds to translation requests from NSP, (Col 9, lines 42-46), Dynamic Host configuration Protocol (DHCP) server—assigns IP addresses to MTAs and PCs for the high-speed data service, (Col.

9, lines 50-52)). However, Chow fails to disclose explicitly about local address and server's destination address.

Kalmanek, in the same field of invention, discloses network address translator with global address and local address (page 10, table 3, i.e. global and local addresses are destination and local address or vice versa). Kalmanek demonstrates global and local addresses by having destination and local address.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have destination address and local address taught by Kalmanek in Chow, in order to show sender's local address and server's apparatuses destination address.

Regarding Claim 34, Chow in view of Kalmanek discloses mobile terminal device sends control request and communication unit in the terminal apparatus receives it via router (Fig 1, sheet 1).

Regarding Claim 35, Chow in view of Kalmanek discloses mobile terminal device sends control request and communication unit in the terminal apparatus receives it via router (Fig 1, sheet 1).

Regarding Claim 36, Chow in view of Kalmanek discloses a plurality of terminal apparatuses are connected to the home terminal apparatus via the home network (100) (Fig 1, sheet 1). A control unit operable to control the home terminal apparatus according to the control information (EWCSF access port connected to MTA. The AP and MTA may be physically one unit or two physically distinct and interconnected units. Media terminal equipment integrated with a modem for access to service provider's

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broadband transport network and to the service provider's broadband packet network, (Col 8, lines 12-18), the access port receives and sends unless signals to a plurality of wireless devices. This architecture (communication unit) also allows the user control these devices remotely from the residence, business, SOHO or public environments (Col 2, Lines 62-66).The communication exchange between the NSP and the network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, (Col 11, Lines 15-24)).

Regarding Claims 37, Chow discloses a generation unit to generate packet data to be sent to the server periodically (VoIP, abstract). Chow further discloses about a storage unit (generation unit) (a main central processing unit (CPU) (capable of sending and receiving data)that includes ROM and RAM memory, (Col 17, Lines 22-34); packets of voice and data information received over the Ethernet interface are passed to the appropriate endpoint as desired by the user. Additionally, main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service maintained (Col 18, Lines27-24)); Chow also mentions about a storage unit of terminal apparatus (generation unit and storage unit are interconnected) stores a unique terminal ID (which is a Mac address (6 byte address) comes from the manufacturer uniquely given and commonly known) of the home terminal apparatus, local port of the terminal device , address of the server and local port of the server (A port is an address that identifies which process is to receive a message that is delivered

to a given machine; Widely used applications have well-known port numbers assigned to their servers so that clients (have port numbers too) process in other computers can readily make requests as required (Col 18, lines 50-55). The servers send responses based on requests in an interval. (This concept of port is commonly known in network world). In addition, Directory server—contains E.164 number to IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN gateway, or the IP address of a NSP. Responds to translation requests from NSP, (Col 9, lines 42-46), Dynamic Host configuration Protocol (DHCP) server—assigns IP addresses to MTAs and PCs for the high-speed data service, (Col. 9, lines 50-52)). However, Chow fails to disclose explicitly about local address and server's destination address.

Kalmanek, in the same field of invention, discloses network address translator with global address and local address (page 10, table 3, i.e. global and local addresses are destination and local address or vice versa). Kalmanek demonstrates global and local addresses by having destination and local address.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have destination address and local address taught by Kalmanek in Chow, in order to show sender's local address and server's apparatuses destination address.

Regarding Claim 38, Chow doesn't disclose an adjustment unit.
Kalmanek , in the same field of invention, discloses setting a period shorter than the holding period which is KEEP ALIVE message (page 18, paragraph [0398]). While

having connection on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek also discloses when call or connection is on hold, BTI sends periodical message to edge router (Page 18, paragraph [0398]). When BTI is on hold, gates adjustments are performed (Page 15, paragraph [0308], gate allows the sender to perform operation at this gate. If adjustment isn't made at the gate, BIT can't send message periodically to the edge router shorter than the holding period). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period (meaning adjusting time or period) shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to adjust the sending interval.

Regarding Claim 39, Chow discloses a generation unit to generate packet data to be sent to the server periodically (Col. 9, lines 55-62, VoIP, abstract). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130], i.e. as the global addresses can be released after a time period of inactivity meaning corresponding relationship between global address and local address is held for a predetermined period of time). Kalmanek also discloses setting a period shorter than the holding period which is KEEP ALIVE message (page 18, paragraph [0398]). While having connection on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claim 40, Chow discloses a generation unit to generate packet data to be sent to the server periodically (Col. 9, lines 55-62, VoIP, abstract). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period

during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130], i.e. as the global addresses can be released after a time period of inactivity meaning corresponding relationship between global address and local address is held for a predetermined period of time). Kalmanek also discloses setting a period shorter than the holding period which is KEEP ALIVE message (page 18, paragraph [0398]). While having connection on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claim 41, Chow discloses a home terminal apparatus that is connected to an external network to which a server apparatus is connected and terminal apparatus being connected to the router via home network for sending and receiving data to and from a router (Fig 1, sheet 1). Chow also discloses a communication unit operable to send and receive data to and from the server apparatus repeatedly (Fig 1, sheet 1 and Col 3, lines 43-46). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130], i.e. as the global addresses can be released after a time period of inactivity meaning corresponding relationship between global address and local address is held for a predetermined period of time). Kalmanek also discloses setting a period shorter than the holding period which is KEEP ALIVE message (page 18, paragraph [0398]). While having connection on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claim 42, Chow discloses a home terminal apparatus that is connected to an external network to which a server apparatus is connected and terminal apparatus being connected to the router via home network for sending and receiving data to and from a router (Fig 1, sheet 1). Chow also discloses a communication unit operable to send and receive data to and from the server apparatus repeatedly (Fig 1, sheet 1 and Col 3, lines 43-46). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130]. Kalmanek teaches network address translation for any information that a calling party or a called party (such as PDA, cell phones, VCR) desires to keep private such as caller ID information or address information should be accessible to the network but not to other untrusted entities (page 9, paragraph [0121]). Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention to use the NAT of Kalmanek in the system of Chow to obtain a system containing a router having a holding period for a relationship between a global address assigned to the router and a local address of a terminal because this allows the system to keep some information private. However, Chow in view of Kalmanek does not disclose to set a period shorter than the holding period as a sending interval at which the data is sent.

Kalmanek, in the same field of invention, discloses KEEP ALIVE message. While a connection (such as corresponding relationship between global address and local address) is on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claims 43 and 44, Chow discloses a generation unit to generate packet data to be sent to the server periodically (VoIP, abstract). Chow further discloses about a storage unit (generation unit) (a main central processing unit (CPU) (capable of sending and receiving data) that includes ROM and RAM memory, (Col 17, Lines 22-34); packets of voice and data information received over the Ethernet interface are passed to the appropriate endpoint as desired by the user. Additionally, main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service maintained (Col 18, Lines 27-24)); Chow also mentions about a storage unit of terminal apparatus (generation unit and storage unit are interconnected) stores a unique terminal ID (which is a Mac address (6 byte address) comes from the manufacturer uniquely given and commonly known) of the home terminal apparatus, local port of the terminal device, address of the server and local port of the server (A port is an address that identifies which process is to receive a message that is delivered to a given machine; Widely used applications have well-known port numbers assigned to their servers so that clients (have port numbers too) process in other computers can readily make requests as required (Col 18, lines 50-55). The servers send responses based on requests in an interval. (This concept of port is commonly known in network world). In addition, Directory server—contains E.164 number to IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN gateway, or the IP address of a NSP. Responds to translation requests from NSP, (Col 9, lines 42-46), Dynamic Host configuration Protocol (DHCP) server—assigns IP addresses to MTAs and PCs for the high-speed data service, (Col.

9, lines 50-52)). However, Chow fails to disclose explicitly about local address and server's destination address.

Kalmanek, in the same field of invention, discloses network address translator with global address and local address (page 10, table 3, i.e. global and local addresses are destination and local address or vice versa). Kalmanek demonstrates global and local addresses by having destination and local address.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have destination address and local address taught by Kalmanek in Chow, in order to show sender's local address and server's apparatuses destination address.

Regarding Claim 45, Chow discloses a home terminal apparatus that is connected to an external network to which a server apparatus is connected and terminal apparatus being connected to the router via home network for sending and receiving data to and from a router (Fig 1, sheet 1). Chow also discloses a communication unit operable to send and receive data to and from the server apparatus repeatedly (Fig 1, sheet 1 and Col 3, lines 43-46). However, Chow fails to disclose explicitly about an adjustable unit operable to detect a holding period during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130]. Kalmanek teaches network address translation for any information that a calling party or a called party (such as PDA, cell phones, VCR) desires to keep private such as caller ID information or address information should be accessible to the network but not to other untrusted entities (page 9, paragraph [0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the NAT of Kalmanek in the system of Chow to obtain a system containing a router having a holding period for a relationship between a global address assigned to the router and a local address of a terminal because this allows the system to keep some information private. However, Chow in view of KalamaneK does not disclose to set a period shorter than the holding period as a sending interval at which the data is sent.

Kalmanek, in the same field of invention, discloses KEEP ALIVE message. While a connection (such as corresponding relationship between global address and local address) is on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding

relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claims 46 and 47, Chow discloses a generation unit to generate packet data to be sent to the server periodically (VoIP, abstract). Chow further discloses about a storage unit (generation unit) (a main central processing unit (CPU) (capable of sending and receiving data) that includes ROM and RAM memory, (Col 17, Lines 22-34); packets of voice and data information received over the Ethernet interface are passed to the appropriate endpoint as desired by the user. Additionally, main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service maintained (Col 18, Lines 27-24)); Chow also mentions about a storage unit of terminal apparatus (generation unit and storage unit are interconnected) stores a unique terminal ID (which is a Mac address (6 byte address) comes from the manufacturer uniquely given and commonly known) of the home terminal apparatus, local port of the terminal device, address of the server and local port of the server (A port is an address that identifies which process is to receive a message that is delivered to a given machine; Widely used applications have well-known port numbers assigned to their servers so that clients (have port numbers too) process in other computers can readily make requests as required (Col 18, lines 50-55). The servers send responses based on requests in an interval. (This concept of port is commonly known in network

world). In addition, Directory server—contains E.164 number to IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN gateway, or the IP address of a NSP. Responds to translation requests from NSP, (Col 9, lines 42-46), Dynamic Host configuration Protocol (DHCP) server—assigns IP addresses to MTAs and PCs for the high-speed data service, (Col. 9, lines 50-52)). However, Chow fails to disclose explicitly about local address and server's destination address.

Kalmanek, in the same field of invention, discloses network address translator with global address and local address (page 10, table 3, i.e. global and local addresses are destination and local address or vice versa). Kalmanek demonstrates global and local addresses by having destination and local address.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have destination address and local address taught by Kalmanek in Chow, in order to show sender's local address and server's apparatuses destination address.

Regarding Claim 48, Chow discloses a home terminal apparatus that is connected to an external network to which a server apparatus is connected and terminal apparatus being connected to the router via home network for sending and receiving data to and from a router (Fig 1, sheet 1). Chow also discloses a communication unit operable to send and receive data to and from the server apparatus repeatedly (Fig 1, sheet 1 and Col 3, lines 43-46). However, Chow fails to disclose explicitly about an

adjustable unit operable to detect a holding period during when relationship between global and local is held and set a period shorter than the holding period as a sending interval.

Kalmanek, in the same field of invention, discloses a method for allocating resources (Title). Kalmanek discloses network address translator (page 10, table 3) to show the corresponding relationship for a predetermined period of time (page 10, paragraph [0130]. Kalmanek teaches network address translation for any information that a calling party or a called party (such as PDA, cell phones, VCR) desires to keep private such as caller ID information or address information should be accessible to the network but not to other untrusted entities (page 9, paragraph [0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the NAT of Kalmanek in the system of Chow to obtain a system containing a router having a holding period for a relationship between a global address assigned to the router and a local address of a terminal because this allows the system to keep some information private. However, Chow in view of Kalamanek does not disclose to set a period shorter than the holding period as a sending interval at which the data is sent.

Kalmanek, in the same field of invention, discloses KEEP ALIVE message. While a connection (such as corresponding relationship between global address and local address) is on hold, it's necessary to periodically inform that the connection is still alive and healthy as a sending interval (page 18, paragraph [0398]). Kalmanek demonstrates an adjustment unit operable to detect a holding period which is the corresponding

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relationship between global address and local address and set a period shorter than the holding period by using KEEP ALIVE message as a sending interval.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have an adjustable unit with a corresponding relationship between global and local addresses and to set a period shorter than the holding period as a sending interval taught by Kalmanek, in Chow, in order to demonstrate a terminal apparatus with adjustable unit to detect a holding period.

Regarding Claims 49 and 50, Chow discloses a generation unit to generate packet data to be sent to the server periodically (VoIP, abstract). Chow further discloses about a storage unit (generation unit) (a main central processing unit (CPU) (capable of sending and receiving data) that includes ROM and RAM memory, (Col 17, Lines 22-34); packets of voice and data information received over the Ethernet interface are passed to the appropriate endpoint as desired by the user. Additionally, main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service maintained (Col 18, Lines 27-24)); Chow also mentions about a storage unit of terminal apparatus (generation unit and storage unit are interconnected) stores a unique terminal ID (which is a Mac address (6 byte address) comes from the manufacturer uniquely given and commonly known) of the home terminal apparatus, local port of the terminal device, address of the server and local port of the server (A

port is an address that identifies which process is to receive a message that is delivered to a given machine; Widely used applications have well-known port numbers assigned to their servers so that clients (have port numbers too) process in other computers can readily make requests as required (Col 18, lines 50-55). The servers send responses based on requests in an interval. (This concept of port is commonly known in network world). In addition, Directory server—contains E.164 number to IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN gateway, or the IP address of a NSP. Responds to translation requests from NSP, (Col 9, lines 42-46), Dynamic Host configuration Protocol (DHCP) server—assigns IP addresses to MTAs and PCs for the high-speed data service, (Col. 9, lines 50-52)). However, Chow fails to disclose explicitly about local address and server's destination address.

Kalmanek, in the same field of invention, discloses network address translator with global address and local address (page 10, table 3, i.e. global and local addresses are destination and local address or vice versa). Kalmanek demonstrates global and local addresses by having destination and local address.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have destination address and local address taught by Kalmanek in Chow, in order to show sender's local address and server's apparatuses destination address.

Response to Arguments

4. Applicant's arguments, see Response, filed 01/24/2008, with respect to the rejection(s) of claim(s) 29-53 under 35 U.S.C 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chow et al (US 7010002 B2) and Kalmanek, JR. et al. (US 2003/0007622)..

Conclusion

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shafiqul Khan whose telephone number is 5712701952. The examiner can normally be reached on Monday to Thursday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 5712721184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Shafiqul Khan/

Examiner, Art Unit 4183

/Len Tran/

Supervisory Patent Examiner, Art Unit 4183